

# Improving the Innovation Capability of Batik SMES Based on Intellectual Stimulation Organizational Supervision and Knowledge Management Accumulated

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## Abstract

*This study aims to identify and analyze the effect of intellectual stimulation, organizational supervision, and knowledge management accumulation. The population in this survey is all batik owners in the city of Semarang. The number of samples taken from a population of 100 respondents was determined using the deliberate sampling method and the Lane show formula. The data analysis method used is quantitative analysis using multiple linear regression analysis to determine the value and nature of the influence of the variables studied. Analysis of the impact of organizational supervision on Innovation Capability: From the above analysis, we conclude that the sig value of organizational supervision is  $0.03 < 0.05$  and the T-Test value is 2.879, which directly impacts organizational supervision on innovation capability. Analysis of the influence of intellectual stimulus on innovation ability: From the above analysis, the T test value of intellectual stimulus is 1.131 we can conclude that there is no direct influence of intellectual stimulation on the ability to innovate. Analysis of the impact of knowledge management accumulation on innovation ability: From the above analysis, it can be obtained the sig value of management accumulation. Since  $0.003 < 0.05$  and the T test value is 2.199, we can conclude that knowledge management accumulation has a direct impact on innovative ability.*

## Keywords

intellectual stimulation;  
organizational supervision;  
knowledge management  
accumulation



## I. Introduction

The era of globalization is marked by the rapid exchange of information and the development of increasingly sophisticated technologies. This has a very strong impact in various lines of life from households to offices. SMEs are one of the business units affected by globalization where there is a free market for the Southeast Asian economic community. This free market between Southeast Asian countries will open up investment in buying and selling, services, goods, and workers. In order to be able to survive in the ASEAN Economic Community (AEC), strategic steps are needed to be able to compete in the global industry, especially for SMEs that are still in the development stage. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019).

UKM gives impact create jobs and grow the economy. (Hapsari, 2011) said that SMEs can reduce unemployment rates compared to other fields and can provide support in the world of commerce so that SMEs become an important part of the national economic milestone.

The competition is quite competitive, making every SME must be aware of what products are being sought and needed in the market, to be able to compete in the global and national markets, SMEs must make changes. These changes are in response to the demands demanded by the market. On the other hand, SMEs must be able to innovate to produce superior products (Setiawan, 2012).

The sector that has the potential to become an economic generator in Indonesia, especially in Central Java is batik. Areas in Central Java have various batik motifs, including Semarangan Batik. The motif of Semarangan batik itself comes from the mascot of Semarang City, between the Great Mosque, Asem, and Lawang Sewu. Lawang Sewu, Mosque.

Based on data from the Department of Industry and Trade, Central Java, data shows that Semarang City batik has only been able to enter the Singapore market, while batik from other regions such as Solo and Pekalongan has been able to export batik to several countries. The data above shows that the market reach of Semarang's batik is still quite low compared to other areas, both Solo and Pekalongan. It depends on the staff. Human resources who are not yet competent in their fields, and the development of Semarangan batik has not been maximized. In addition to the problem of talent quality, social and economic conditions also affect the competitiveness of batik. (Mutmainah et al., 2016) found that almost 50% of SMEs are unable or unable to make good strategies. Limited performance, limited talent, and quality of competitive strategy can be obstacles to the development of SMEs.

HR managers must have a role in providing strategies for both talent management, human resource development, human resource assistance programs, profit sharing strategies, problem solving within the organization between human resources and leaders as well as providing communication space for human resources. Today, HRM departments can no longer limit themselves to monotonous files or documents, but with the invention and advancement of IT, HRM work has become efficient, faster and cost-effective to embrace future organizational needs.

These automation changes require habits that take time regardless of the company's interests. This change can be called a digital culture. Basically a digital culture can be implanted in an organization, but it requires the right methodology and discipline. As stated by Berman (2013), this has resulted in the emergence of new ecosystems that are more innovative, complex, and dynamic (Berman 2013). The right digital transformation strategy will drive business processes to make revolutionary changes in the way businesses operate, interact Knowledge Management, and configure, leadership, and knowledge sharing (Knowledge Management) has been widely recognized as a key resource for companies to drive innovation capabilities and achieve effectiveness. organization, survival and sustainable competitive advantage (Choi et al., 2016; Le and Lei, 2017; Ritala et al., 2018).

This must be handled well by company leaders in order to survive in the current era of globalization and one of the solutions is that transformational leadership may be able to increase the company's innovation capabilities (Prasad and Junni, 2016; Zheng et al., 2016; Sattayara and Boon -itt, 2018

Transformational leadership positively involves the company's innovation ability through intellectual stimulation, encourages openness between individuals (Vera and Crossan, 2004), inspires and motivates employee innovation behavior (Choi et al., 2016). However, knowledge of the direct correlation between transformational leadership and innovation capability remains underdeveloped and inadequate.

There are still theoretical and empirical gaps in Transformational Leadership--innovation relationships, which we need to continue to explore and study (Choi et al., 2016; Jia et al., 2018), especially the relationship between Transformational Leadership and certain aspects of innovation (Anderson et al. al., 2014). Therefore, this study was carried out not only to explore the Accumulation of Knowledge Management on the different effects of Transformational Leadership on each aspect of innovation capability namely product innovation and process innovation but also to deepen understanding of the paths and conditions for improving specific aspects of innovation capability by assessing the role of Mediating Knowledge Management Accumulation and moderating mechanisms of perceived organizational support

## **II. Review of Literature**

### **2.1 Innovation Capability**

Innovation capability refers to the company's ability to be able to maximize both knowledge and ideas into a new process or system for the organization itself. Individuals who fall into the innovative criteria are individuals who can maximize new ideas (Kemer & Altuntas, 2017).

A firm's innovation capability can be described at several different levels and from several different perspectives (Olsson et al., 2010). Akman and Yilmaz (2008) define innovative capabilities as key elements that enable an innovative organizational culture, characteristics of internal promotion activities, and the ability to understand and respond appropriately to the external environment. The company's ability to innovate can also be described as its ability to continuously innovate in response to environmental changes (Olsson et al., 2010). Tuominen and Hyvo"nen (2004) suggest that organizational innovation capabilities need to be divided into two separate entities: management innovation and innovation. Martinez Romanet. (2011) Divided innovation capability into three components: knowledge, organization, and human factors. All of these have a management innovation perspective. Another approach is to discuss the technical factors of innovation management and the human factors of innovation management (Prajogo and Ahmed, 2006). Human factors include people and social practices as components of organizational success. In addition, the term "business innovation capability" is used to describe the critical success factors of the innovation process (Perdomo Ortiz et al., 2006). This important factor can be interpreted as one aspect of the innovative ability of entrepreneurs. Therefore, capacity can be measured by factors. Indicators of Innovation ability according to Saunila & Ukko (2011)

### **2.2 Organizational Supervision**

Supervision is one of the functions of management and leadership. Supervision is envisioned as various steps taken to ensure that supervision bridges leadership and management qualities when workers perform their jobs effectively and professionally (Mathis, 2015). : 96). Meanwhile, according to Aswar (2017: 36), superiors observe the work of their subordinates directly and regularly, and if a problem is found, instructions and guidance or support are given to overcome it.

Supervision can be identified as an effort to ensure that officers carry out their duties properly. Supportive (non-punitive) and well-planned monitoring is essential to the success of a community-based health program. In addition, restrictions on human and financial resources are said to limit the frequency of generally available surveillance programs (Robbins, 2017: 62). The Board of Directors also has a significant influence on

personal performance. This supervision cannot separate the impact of supervisory supervision on supervisory supervision. The management process must be developed directly through coordination with group members and must have characteristics that facilitate development in order to achieve organizational goals (Thoha, 2016: 57).

### **2.3 Intellectual Stimulation**

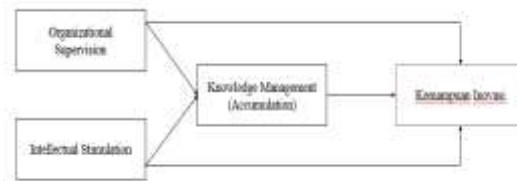
The idea of the transformational leadership model was developed by James MacGregor Burns who has applied this model to the context of political knowledge management and continues to be shaped and introduced into the context of organizational knowledge management by (R. Eisenbach, K. Watson, and R. Pillai, 1999). Leaders challenge their subordinates to come up with new ideas and creative solutions to their problems. As a result, subordinates are highly involved and efficient in the process of developing problems and solutions. The individual attention exercised by transformative leaders is one of the reasons leaders have the ability to build trust and respect and motivate subordinates to exceed expectations (B.J. Avolio and B.). M. Bass, 1993). According to NJAllen and JPMeyer, organizational involvement is a way to identify and involve an organization and become a permanent member of the organization (1990) There are three components in organizational commitment consisting of: (a) the willingness of employees to involve themselves and to identify themselves they are with the organization because there are similarities in organizational values, (b) continuity, commitment that arises from anxiety about losing the benefits of an organization, (c) normative, commitment that arises from employees who feel the need to stay in the organization. These three commitments have been tested by ( B. M. Bass, Bass 1990) which suggests many possibilities. Transformational leadership may show a strong positive relationship with effectiveness because it provides strong feelings and adequate support to motivate subordinates to stay in the organization, while contingent rewards may be positively related to continuity commitment because there is anxiety about losing benefits when leaving the organization (P. RD Hackett, and JS Allen, 1995).

### **2.4 Knowledge Management Accumulation**

The Knowledge Economy and Society (Dean & Kretschmer, 2007; Grant, 1996) is characterized by the globalization of the economy, the emergence of technological advances in several industrial and scientific domains and the progressive prominence of knowledge-intensive and technology-based industries (Lancioni & Handran, 2009). Additionally, extremely short product life cycles, and accelerated rates of change in customer needs and preferences are cited as distinctive features of the current industry paradigm. In this new competitive arena, knowledge edge and intellectual assets are emerging as new key production factors, replacing the traditional – land, labor, and capital – in explaining the viability and competitive advantage of firms (Martín-de Castro, Delgado-Verde, Navas-López , & López Sáez, 2011).

Wallman (2014) highlights, the increasing complexity of business, especially in the B2B market, makes it more relevant for demics marketing academics to create new ways of thinking about marketing capabilities and strategies. From the management literature, current theoretical developments that differ in opments as the 'Knowledge-Based View' or the 'Intellectual Capital-Based View' (Reed, Lubatkin, & Srinivasan, 2006) state that a firm's innovation capabilities are highly dependent on the intellectual assets and knowledge they possess. have (Subramaniam & Youndt, 2005), as well as on their ability to deploy it, understand the innovation process as one of the most knowledge-intensive complex business processes (Grant, 1996; Nonaka & Takeuchi, 1995). However, despite

the highly intuitive character of the innovation capabilities of this intellectual asset link, additional research efforts aimed at exploring this phenomenon are needed.



**Figure 1. Empirical Model**

The above model is a derivative of the organizational factor variable, *Trasf. Leadership* and knowledge management are expected with our proposed empirical model focusing on improving innovation performance in tie-dye SMEs. The development of this research hypothesis is related to the work of previously, especially the work of Civi (2000). Webb (2001); Carter (2013) and Saraswati & Widiartanto (2016) describe the relationship between knowledge management and corporate success. In particular, Veselá & Klimová (2014) explain that knowledge management is an important aspect in supporting creative economic activities. Knowledge management plays an important role in business processes and can improve business activities and achieve the highest level of performance through knowledge accumulation (Suciu et al., 2014).

### III. Research Method

#### 3.1 Types of research

This research is an explanatory research. Masri Singarimbun (1995) says that research that is explanatory or explanatory is research that highlights the influence between the determining variables and tests the proposed hypothesis, where the description contains a description but focuses on variable relationships. These variables include: Organizational Supervision, Intellectual Stimulation, Management Accumulation, and Innovation Capability.

#### 3.2 Method of collecting data

This survey uses data collection methods by distributing surveys by collecting data directly in the form of submitting a list of questions to respondents. The questionnaire was placed in an envelope and forwarded directly to the reader, and returned in a sealed envelope to protect confidentiality interviewee.

#### 3.3 Respondent

Population is a group of individuals with certain qualities and characteristics. The population in this survey is the owner of Batik SMEs in Semarang, with a total population of 117 people. Due to the many limitations in conducting the survey, the sample was taken from the entire population. The sample is part of the number and characteristics possessed by the population. In addition, to generalize the findings to the entire population, the sample taken must be truly representative (Sugiono, 2012, p.118). According to Cohen et al. (2007, p. 101) A sample that is larger than the existing population size is better, but the minimum number that researchers need to obtain is 100 samples.



### 3.4 Hypothesis test

The analytical method used to test the hypothesis in this study is path analysis. Path analysis is used to determine the relationship between the variables and the model built. Path analysis can be done by estimating directly or indirectly the magnitude of the causal relationship between a set of variables and the hierarchical position of each variable in the set of causal paths. In this case, direct influence means the relationship between variables that do not go through other variables, and indirect influence means that the variables are bridged with other variables, that is, they must go through other variables, meaning the relationship between. The amount of direct and indirect influence between variables can usually be determined from the value of the beta coefficient and the regression value.

The formula format is shown below.

1.  $Y1 = b1 X1 + b2 X2 + e$
2.  $Y2 = b1 X1 + b2 X2 + b3 Y1 + e$

Description:

- a. X1 = Organizational Supervision
- b. X2 = Transformational Leadership
- c. Y1 = Accumulated Knowledge Management
- d. Y2 = Innovation Capability

#### a. T-Test

Testing in research through t-test by comparing the t-value (observation) with the t-table value at  $\alpha = 0.05$ . If the test results show

1.  $t \text{ count} > t \text{ table}$ ,  $H_0$  is rejected. This means: (1) endogenous variables can explain exogenous variables and (2) there is an influence between the two variables being tested.
2.  $t \text{ count} < t \text{ table}$ , then  $H_0$  is accepted. It means: (1) the endogenous variable cannot explain the endogenous variable, and (2) there is no effect between the two variables being tested.

## IV. Result and Discussion

This study aims to identify the value and nature of the impact on the variables of intellectual stimulation, organizational supervision, and innovative ability variables with the accumulation of knowledge management as an intervening variable. The distribution of survey respondents is expected to explain the sample based on education, gender, and. The survey sample size is 100 people. Descriptive statistics about the distribution of respondents are as follows:

### 4.1 Research Overview

No	Respondent	Total	Presentase
1.	Gender		
	Man	33	33 %
	Woman	67	67 %
2.	Education		
	Senior High School	57	57 %
	S1	25	25 %
	D3	17	17 %
	Etc	1	1 %

*The data source is processed in 2022.*

Based on the table of respondents' description analysis results, it is known that the number of consumers in terms of gender, female owners are more than men where it can be seen that out of 100 people, male workers are 33% or 33 people and women are 67% or as many as 67 people. This indicates that the majority who are involved in the world of batik are women, women tend to have a more thorough attitude, understand market share and current trends. Regarding education level, 57% or 57 out of 100 employees were trained at SMA/SMK level, 17% or 17 at D3 level, and 25% or 25 at undergraduate level 1. I understand. 1% or up to 1 person at base level 2 with people. Yes, looking at the data above, we can conclude that there is still a shortage of college graduates who want to work in the batik world.

#### 4.2 T. Test Table

Hypothesis	B	Standart Coefficient	T Statistics	Sig	Result
SO→KA	0,141	0,338	2.879	0,005	Accepted
IS→ KA	0,062	0,133	<b>1.131</b>	0,030*	Rejected
KA →KI	0.129	0.189	2.199	0,000*	Accepted
IS→KI	0.408	0.533	6.420	0,002*	Accepted
KA →KI	0.351	0.214	2.999	0,003*	Accepted

*Source: Processed primary data, 2022*

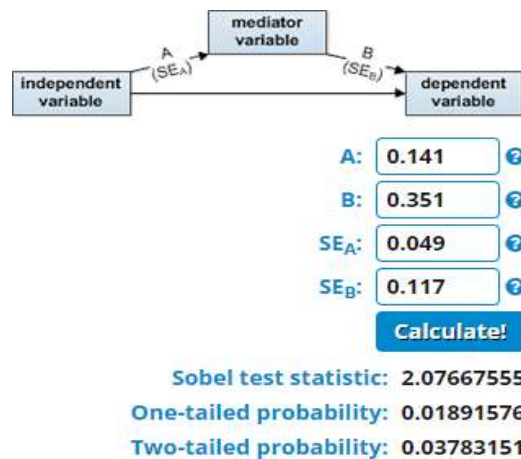
Based on the SPSS Coefficient output table above, it is known that the T test value of the influence of Organizational Supervision on Management Accumulation with a value of  $2.879 > 1.984$  so that it can be concluded that there is a direct influence of Organizational Supervision on Management Accumulation.

Analysis of the influence of Intellectual Stimulation on Management Accumulation: From the above analysis, the Intellectual Stimulation T-Test value is  $1,131 < 1,984$ , so it can be concluded that there is no direct influence of Intellectual Stimulation on Management Accumulation.

Analysis of the influence of Organizational Supervision on Innovation Ability: From the analysis above, the T-Test value of Organizational Supervision is  $2.199 > 1.984$ . So it can be concluded that there is a direct influence of Organizational Supervision on Innovation Ability.

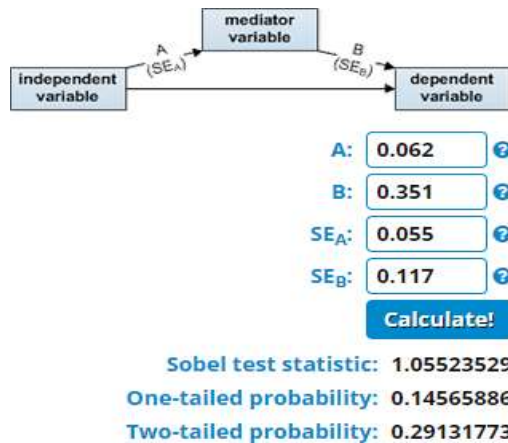
Analysis of the influence of Intellectual Stimulation on Innovation Ability: From the above analysis, the T-Test value of Intellectual Stimulation on Innovation Ability is  $6,420 > 1,984$ . So it can be concluded that there is a direct influence of Intellectual Stimulation on Innovation Ability

Analysis of the influence of Knowledge Management Accumulation on Innovation Ability: From the analysis above, the T-Test value of Management Accumulation on Innovation Ability is  $2.999 > 1.984$  .. so it can be concluded that there is a direct influence of Knowledge Management Accumulation on Innovation Ability.



**Figure 1. Testing Model (Sobel Test)**

In the picture above we can see that A (regression coefficient of organizational supervision on innovation ability) is 0.141, B (regression coefficient of intellectual stimulation on innovation ability) is 0.351,  $SE_A$  (standard error of A) is 0.049 and  $SE_B$  (standard error of B) is 0.117. From this data, it is then calculated and produces a one-tailed probability and a two-tailed probability of 0.037 < 0.05, which means that the accumulated knowledge management is accepted as a moderating variable, which is significant. This means that the higher the value of organizational supervision carried out has an impact on increasing Management Accumulation so that the Innovation Performance in the Batik Semarang Village becomes higher.



**Figure 2. Testing Model (Sobel Test)**

In the picture above we can see that A (regression coefficient of organizational supervision on innovation ability) is 0.062, B (regression coefficient of intellectual stimulation on innovation ability) is 0.351,  $SE_A$  (standard error of A) is 0.055 and  $SE_B$  (standard error of B) which is 0.117. From this data, it is calculated and then produces a one-tailed probability and a two-tailed probability of 0.29 > 0.05, which means that the accumulation of knowledge management is not accepted as a moderating variable. Knowledge So that management can immediately pay attention to Innovation Ability or can use a substitute variable.



### **4.3 The Effect of Organizational Supervision on Innovation Ability**

Based on the results of the t-test calculation, the t-count X value is 6.420 and the sig value is 0.000 with the obtained significance value. With a significance level gain of less than 5%, we can conclude that organizational oversight has a significant positive impact on our ability to innovate. Thus, it can also be interpreted that if there is organizational supervision, it will have a linear impact on the ability to innovation. This means that the batik owners in the Semarang batik village have carried out organizational supervision well but need to improve other low indicators such as commitment, monitoring and supervision in carrying out supervision while other indicators have been running well. With good organizational supervision, it will improve the quality of existing human resources in the Semarang batik village, so that with an increase in the quality of human resources that will lead to good innovation abilities as well.

Supervision is defined as various steps taken to ensure that supervision bridges the quality of leadership and management in carrying out activities effectively and professionally (Mathis, 2015). This supervision is carried out through direct and periodic observations by the employee's supervisor. If the problem is identified later, it will provide instructions and guidance or assistance to overcome the problem. Supervision also has a significant impact on individual performance. In this supervision, the supervisor's leadership cannot be separated from the influence of the supervisor's leadership, and the leadership process is designed and has the appropriate characteristics to be developed directly through the coordination of group members.

### **4.4 The Effect of Intellectual Stimulation on Innovation Ability**

Based on the results of the t-test calculation, the t-count result is 2.199, and the significance value shows a sig value of 0.030. Since the acquisition rate of significant difference is less than 5%, we can conclude that intellectual stimulation has a significant positive impact on our ability to innovate. Thus, it can also be interpreted that if there is an intellectual stimulus, it will have a linear impact on the ability to innovation. Intellectual stimulus is going well because the relationship between employees and owners is going well. This is because the business scale is still small. With a small-scale business can also facilitate the existing cooperation within the company. Furthermore, it is necessary to increase the discipline, mutual respect and freedom of thought of employees to help increase innovation within the company.

The results of this study support (Jung et al., 2003) Leadership through different traits inspires their employees to show their efforts and potential by using innovative behavior to achieve the vision and mission of the institution. In this connection, on the leadership continuum, two leadership styles (transformational & transactional) are considered most effective in inspiring employee behavior through different artistic attributes (Harland et al., 2005). In this case intellectual stimulation, stimulates employees to show innovative, creative, and affirmative behavior in achieving the leader's vision and institutional tasks (Jong & Hartog, 2007). Behavioral leadership (intellectual stimulation) dynamically influences employee attitudes and behavior in carrying out institutional activities effectively and helps in promoting innovation in institutions (Okay et al., 2009). Intellectually stimulated employees are more concerned with the assigned tasks and perform their responsibilities innovatively to achieve the assigned tasks with the desired standard (Aryee et al., 2012).

#### **4.5 The Effect of Accumulated Knowledge Management on Innovation Capability**

Based on the results of the t-test calculation, the t-count result is 2.199, and the significance value shows a sig value of 0.030. Since the acquisition rate of significant difference is less than 5%, we can conclude that intellectual stimulation has a significant positive impact on our ability to innovate. Thus, it can also be interpreted that if there is an accumulation of knowledge management, it will have a linear impact on innovation ability. This can happen because the scale of the business is still small and there are not so many employees so that the existing indicators can work well. In addition, the small scale also reduces miscommunication within the company. The thing to note is that the expansion of knowledge is quite low, this happens because of the lack of comparative studies and benchmarking by the owner so that what happens is the level of innovation is stagnant. The rest is pretty good starting from problem solving in the company, access to knowledge which is helped by the internet and good knowledge filtering and supported by good knowledge storage by saving files and prints that have been made.

These results support the empirical research of Kaya et al. (2013) "The impact of the HRM function on innovation mediated by the knowledge management function" shows that human resource management (HR) skills are positively related to knowledge management (KM) skills which constitute innovation. Knowledge management programs are usually focused on organizations. As Nonaka and Takeuchi (1995) suggest, the goal is to achieve certain outcomes, such as information sharing, improving performance, increasing competitive advantage, and pushing innovation to a higher level. SMEs powered by knowledge management can be considered competitive in their own right and have an organizational competitive advantage created from this feature due to its non-transferable nature.

#### **4.6 The Effect of Intellectual Stimulation on Innovation Ability through Knowledge Accumulation**

Referring to the table of results of the descriptive analysis of Organizational Supervision which was measured using the indicators of Relationship Leadership, Discipline, Respect, Independent thought and Encourage team, the total average score was 4.26 so that it was included in the assessment criteria which was quite high. This means that batik owners have made efforts to optimally stimulate employee intellectuals. This can happen because the business scale is still small and there are not so many employees so that the existing indicators can work well. Especially indicators Relationship Leadership and Encourage team. With the intensity of meeting frequently and with few people, it will minimize individual interests in an organization or company and teamwork will be easier because of the lack of miscommunication that occurs.

In the picture above we can see that A (regression coefficient of organizational supervision on innovation ability) is 0.062, B (regression coefficient of intellectual stimulation on innovation ability) is 0.351, Sea (standard error of A) is 0.055 and Seb (standard error of A) B) which is 0.117. From the data, it is calculated and then produces a one-tailed probability and a two-tailed probability of  $0.29 > 0.05$ , which means that the accumulation of knowledge management is not accepted as a moderating variable. management can directly pay attention to Innovation Ability or can use a substitute variable. This happens because in the Semarang batik village there are many craftsmen who compete with each other in a negative way to get consumers and a lot of batik products are taken from outside Semarang, for example from Pekalongan and Solo, this makes the innovation ability of the batik craftsmen there quite low judging from the questionnaire where they are average on average make a new design for 1 year 1-3 times in one year.

#### 4.7 The Effect of Organizational Supervision on Innovation Ability through Knowledge Accumulation

In the figure above, A (koefisien regresi organizational monitoring for innovative ability) is 0.141, B (intellectual stimulus regression coefficient for innovative ability) is 0.351, sea (standard error A) is 0.049, Seb. I understand this. (B's standard error is b.) is 0.117. Calculated from these data, one-sided and two-sided probabilities are 0.037 & It;. 0.05 means that the accumulation of knowledge management is accepted as a coordination variable. This means that the higher the value of organizational supervision carried out, the higher the innovation performance of Kampung Batik Semarang which will have an impact on increasing the accumulation of management. The results of this study are research contributions where the results of the combination of elements of variable organization (supervision) and knowledge management for innovative abilities have not been applied.

Not many studies have reported the same results. Implementation of an integrated knowledge management system with good knowledge management and supervision can increase innovative capabilities. The role of knowledge management can also be seen in terms of using knowledge as a basis for innovation and responding to customer and stakeholder needs.

### V. Conclusion

1. Analysis of the impact of organizational supervision on Innovation Capability: From the above analysis, we conclude that the sig value of organizational supervision is  $0.03 < 0.05$  and the T-Test value is 2.879, which directly impacts organizational supervision on innovation capability.
2. Analysis of the influence of intellectual stimulus on the ability to innovate: From the above analysis, the T-test value of intellectual stimulus is 1.131 we can conclude that there is no direct influence of intellectual stimulation on the ability to innovate.
3. Analysis of the impact of knowledge management accumulation on innovation ability: From the above analysis, the sig value of accumulated management can be obtained. Since  $0.003 < 0.05$  and the T test value is 2.199, we can conclude that knowledge management accumulation has a direct impact on innovative ability.
4. The accumulation of knowledge management can act as a Mediation Variable between Organizational Supervision and innovation capability. Companies with excellent transformational leadership (intellectual stimulation) and organizational factors (supervision) create a high level of innovation capability. This happens because knowledge management is a bridge from managers to employees, but the opposite is what happened in Kampung Batik Semarang. This shows that knowledge management is accepted as a mediating variable of Organizational Supervision and innovation skills.
5. Knowledge management accumulation cannot act as a Mediation Variable between Intellectual Stimulation and innovation ability

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